

EXHIBIT A

May 15, 2006

The Cell Phone Challenge to Survey Research

National Polls Not Undermined by Growing Cell-Only Population

Summary of Findings

A growing number of Americans rely solely on a cell phone for their telephone service, and many more are considering giving up their landline phones. This trend presents a challenge to public opinion polling, which typically relies on a random sample of the population of landline subscribers. A new study of the issue finds that cell-only Americans – an estimated 7%-9% of the general public – are significantly different in many ways from those reachable on a landline. They are younger, less affluent, less likely to be married or to own their home, and more liberal on many political questions.

Yet despite these differences, the absence of this group from traditional telephone surveys has only a minimal impact on the results. Specifically, the study shows that including cell-only respondents with those interviewed from a standard landline sample, and weighting the resulting combined sample to the full U.S. public demographically, changes the overall results of the poll by no more than one percentage point on any of nine key political questions included in the study.

Estimates of the respondents' likely congressional vote this fall, approval of President Bush, opinion about the decision to go to war in Iraq, and other important social and political measures are unaffected when cell-only respondents are blended into the sample. The relatively small size of the cell-only group, along with the demographic weighting performed when it is combined with the landline sample, accounts for the minimal change in the overall findings.

This research effort was undertaken by the Pew Research Center, in conjunction with the Associated Press and AOL, to assess the challenge posed by cell phones to random digit dial surveys. The project entailed a survey of 1,503 U.S. adults, with 752 interviewed in a conventional landline sample and 751 interviewed on their cell phones, using a sample drawn from a nationally representative cell telephone number database. The interviews were conducted March 8-28, 2006 and averaged about 11 minutes in length. Among those interviewed on their cell phones, 200 (27%) said that their cell phone was their only phone. Details about the survey, including response rates, costs, and other issues, are discussed in the body of the report below.

Including the Cell Phone-Only Public Makes Little Difference in Polling Results

	Standard sample %	Cell only %	Blended sample (landline + cell only) %
<i>Presidential approval</i>	%	%	%
Approve	32	35	33
Disapprove	54	58	53
Don't know/Refused	14	7	13
	100	100	99
<i>Using force in Iraq</i>			
Right decision	39	44	40
Wrong decision	44	46	44
Don't know/Refused	16	11	16
	99	101	100
<i>06 Cong. vote (among RV's)</i>			
Republican/Lean Rep	37	30	37
Democrat/Lean Dem	47	53	47
Would not vote	2	3	2
Other/DK/Ref	13	14	13
	99	100	99
<i>Allow gay marriage</i>			
Agree	37	51	37
Disagree	51	42	51
Don't know/Refused	12	7	12
	100	100	100
<i>Party Affiliation</i>			
Republican/Lean Rep	34	35	35
Democrat/Lean Dem	45	47	45
Independent/Other	21	18	20
	100	100	100
<i>Sample size</i>	(752)	(200)	(952)

The standard landline and blended samples are weighted. The cell only column is unweighted. Due to rounding, the numbers may not add to 100%. Survey conducted March 8-28, 2006.

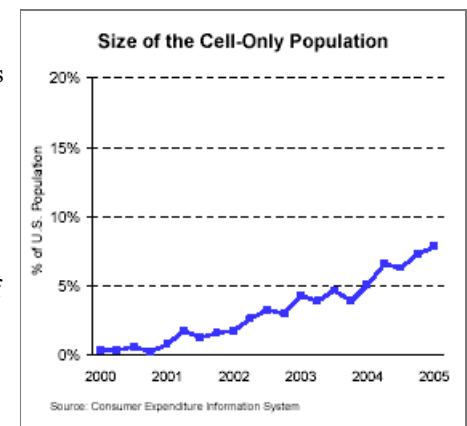
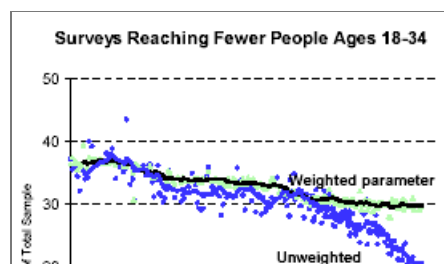
The Cell Phone Challenge

The number of people who have given up their landline telephones and rely solely on a cell phone has been increasing, both in the U.S. and internationally, for several years.

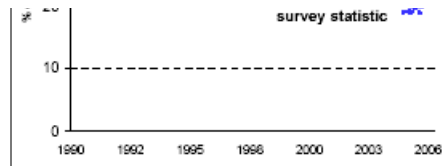
According to the U.S. Consumer Expenditure Survey, the percentage of households paying a cell phone bill but not a landline bill rose from 0.4% in 2000 to 7.8% in the first quarter of 2005.

The National Health Interview Survey estimated that, in the second half of 2005, 7.8% of adults lived in households with only a cell phone. And in the 2004 exit poll by the National Election Pool, 7.1% of voters said they relied solely on cell phones.

As the cell-only population has grown, telephone surveys by Pew and other organizations that rely on landline samples have experienced a sharp decline in the percentage of younger respondents interviewed in their samples. In Pew Research Center surveys over the past five years, the average percentage of those ages 18-34 in unweighted samples declined from 31% in 2000 to 20% through March 2006 (the population parameter was



essentially unchanged through this period). This decline is consistent with the fact that the cell-only population is heavily tilted toward young people.



Profile of Cell-Only Respondents

Nearly half of the cell-only respondents in the survey (48%) are under age 30. This compares with just 14% in the landline sample (people reached on a landline) and 21% in the population as a whole, according to government statistics. Other characteristics associated with age are also distinctive in the cell-only population. Nearly three-in-ten (29%) cell-only respondents are married, compared with 57% in the landline sample. And only 24% say they own their own home; in the landline sample, 71% do so. The cell-only population also includes a higher proportion of minorities, especially Hispanics (14% vs. 6% among landline users).

The landline sample includes a higher proportion of college graduates than does the cell phone-only group (36% vs. 28%). But more cell-only users say they have some college experience compared with people who have landlines (by 33% vs. 24%); this may reflect the heavy reliance on cell phones among those currently attending college. The cell-only group also is significantly less affluent – more than half (53%) have annual family incomes of under \$30,000, compared with just one-quarter (25%) among the landline sample.

Landline vs. Cell Only Samples		
	Landline sample %	Cell only %
Male	48	55
Female	52	46
18-29	14	48
30-49	34	35
50-64	26	13
65+	23	4
White	80	73
Black	10	15
Hispanic	6	14
Married	57	29
Not married	41	71
Never married	18	55
Parent of minor	31	26
Own home	71	24
Rent	22	65
College grad	36	28
Some college	24	33
HS graduate	28	32
Not HS grad	10	8
\$75K+	20	9
\$50K-\$74,999	14	14
\$30K-\$49,999	20	20
Under \$30K	25	53
Sample size	(752)	(200)

Figures based on unweighted data.

Young Cell vs. Landline Users

Young people who rely exclusively on cell phones also are very different – in their lifestyles and family circumstances – from their landline counterparts of similar age. Far fewer cell-only people under age 30 are married, have children, or are homeowners when compared with landline users in this age category. Related to these factors, young cell-only respondents have significantly lower family incomes than young people in the landline sample.

But young cell-only users and landline users do not differ widely in their political attitudes and partisan affiliation. It is true that the cell-only young respondents are more likely to approve of Bush's performance in office than are under-30 landline respondents (35% vs. 22%). On most other issues, however, they are more liberal and Democratic than their landline counterparts, though most of the differences do not achieve statistical significance. The modest nature of all of these differences suggests that young people – whether cell-only or not – are more similar than different politically.

Seniors Stick With Landlines

According to data collected by the National Center for Health Statistics, 53% of Americans use both a landline and a cell phone; 37% have only a landline; and 8% rely only on a cell phone.

Like the cell-only population, Americans who rely solely on a landline are distinctive demographically. Fully 41% are ages 65

and older, compared with 16% of the general public. The landline-only group includes a greater proportion of whites than the general public (82% vs. 73%).

Among dual phone users, there are clear differences between those reached on a cell phone and those contacted on a landline. People who were interviewed on a cell phone are somewhat younger (24% under age 30 vs. 15% among those reached on a landline), more likely to be Hispanic (9% vs. 5%), and slightly more likely to have a child under 18 in the household (43% vs. 35%).

Politically, the landline-only and cell-only groups stand out as more Democratic – both in

Attitudinal Differences Between Landline and Cell Sample Respondents

Landline and Cell Phone Publics				
% of U.S. adults ¹	37%	53%		8%
	Landline only	Landline & cell interviewed on...		Cell only
	%	Landline %	Cell %	%
18-29	10	15	24	48
30-49	25	38	41	35
50-64	22	28	25	12
65+	41	15	9	4
College grad	25	41	38	28
Some college	18	27	27	33
H.S. grad	36	25	28	32
Less than H.S.	18	6	7	8
White	82	79	75	73
Black	10	10	13	15
Asian	1	2	3	3
Other/Mixed	5	5	8	9

their congressional vote intention and party affiliation – than do those who have both types of phone service. Yet there are only modest differences in approval of President Bush among these four groups.

More striking is the wide divide in views about gay marriage. About half of the cell-only population (51%) favors allowing gay marriage, compared with 39% of the dual phone users and just a third of those who have only a landline phone (33%).

This difference mostly reflects the age patterns of these samples. Pew surveys have consistently found that young people – who make up about half of the cell-only population – are more supportive of gay marriage than are older Americans.

And Pew surveys show that people ages 65 and older, who make up a disproportionate share of the landline-only group, are the most opposed to gay marriage.

Proportion of U.S. adults ¹	37%	53%		8%
	Landline only	Landline & cell interviewed on...		Cell only
	%	Landline	Cell	%
<i>Presidential approval</i>				
Approve	29	38	35	35
Disapprove	55	49	55	58
DK/Ref	15	13	11	7
	99	100	101	100
<i>Using force in Iraq</i>				
Right decision	32	45	43	44
Wrong decision	50	40	47	46
Don't know/Refused	18	15	9	11
	100	100	99	101
<i>06 Cong. Vote (among RV's)</i>				
Republican/Lean Rep	29	43	40	30
Democrat/Lean Dem	57	41	49	53
Would not vote	1	2	2	3
Other/DK/Ref	13	14	10	14
	100	100	101	100
<i>Party Identification</i>				
Republican/Lean Rep	27	42	39	35
Democrat/Lean Dem	52	40	48	47
Independent/Other	21	18	13	18
	100	100	100	100
<i>Policies</i>				
Allow gay marriage	33	36	42	51
More help for poor	53	45	54	62
Satisfied financially	59	72	71	64
<i>Sample size</i>	(217)	(535)	(552)	(200)

Figures based on unweighted data.

¹Source: 2005 National Health Interview Survey conducted for the National Center for Health Statistics through in-person interviewing. Figures do not sum to 100 because an estimated 2% of U.S. adults do not have a landline or a cell.

Hispanic	6	5	9	14
Parent of minor	20	35	43	26
	(217)	(535)	(552)	(200)

Figures based on unweighted data.

¹Source: 2005 National Health Interview Survey conducted by the National Center for Health Statistics through in-person interviewing. Figures do not sum to 100 because an estimated 2% of U.S. adults do not have a landline or a cell.

Patterns of Cell Phone Use

As might be expected, a solid majority of respondents in the cell phone sample who also have a landline (62%) say that they make more calls on their cell; nearly half (47%) say they make a lot more phone calls on their cell phone. Dual phone owners from the landline sample use landlines only somewhat more frequently than their cell phones; about half (48%) report making more of their calls on their landline while 42% say they make more calls on their cell phone.

Fully 91% of all respondents in the cell sample keep their cell turned on always or most of the time, compared with 73% of cell owners from the landline sample. A small but notable segment (12%) of cell owners from the landline sample say they rarely turn their cell on or do so only to make a call. Hardly anyone from the cell sample (2%) reported having their cell on this infrequently.

Consequently, heavy users of cell phones are more easily reached and interviewed on their cell phones than are lighter users, resulting in a potential bias on some types of measures. One illustration of this is the fact that 27% of respondents in the cell sample identified themselves as cell-only. But U.S. government estimates indicate that only about 13%-15% of cell owners (approximately 7%-9% of the general public) are cell-only.

People in the cell sample use more cell phone features and options than do cell owners from the landline sample. More people in the cell sample say they use a cell to send and receive text messages (45% cell sample vs. 30% landline sample), take still pictures (39% vs. 22%), and surf the web (18% vs. 13%). Three-quarters of those in the cell sample (75%) have personalized their cell phone by changing the wallpaper or ring tone, compared with 59% of cell owners in the landline sample.

Most people in both samples use only one cell phone, and most do not share their cell phone with others. About one-in-five (19%) of those reached in the cell sample say they regularly use more than one cell phone; the comparable number in the landline sample was 14%. And in each sample, 16% said that another adult regularly answers their cell phone.

Dropping Your Landline?

About a quarter of landline users (23%) say they are very (8%) or somewhat likely (15%) to stop using their landline and switch instead to using only a cell phone. A narrow majority (55%) says they are not

All Cell Users Are Not Created Equal: Usage Patterns Differ by Sample

	Landline & cell interviewed on...		Cell only ¹
	Landline	Cell	%
<i>Keep cell turned on...</i>	%	%	%
Always	49	57	79
Most of the time	24	31	19
Some of the time	14	9	2
Rarely/Never	5	1	0
Only to make a call	7	1	1
Don't know/Refused	8	8	0
	99	99	101

Make more calls on...²

Landline phone	48	29
A lot more	33	18
A few more	14	11
Cell phone	42	62
A lot more	31	47
A few more	11	16
Use both equally	10	8
Don't know/Refused	1	8
	101	99

Figures based on unweighted data.

¹ Cell only respondents are a subset of the cell sample.

² Based on those with both a landline and a cell phone.

likely at all to give up their landline in favor of a cell phone. As may be expected, far more young people than older Americans say they are at least somewhat likely to abandon their landline; 40% of those under age 30 say this compared with 19% of current landline users ages 30 and older.

Implications for Tech-Focused Surveys

Asked about their general opinion of computers and technology, cell-only respondents are much more positive toward computers and technology than are landline-only respondents, and somewhat more positive than other cell phone users who are accessible on a landline.

But there is little difference between the cell-only respondents and cell phone users reached on a landline in their use of the internet and their access to broadband. The only significant difference in internet use is how the respondent gets service: cell-only users are less likely than others to use DSL or a dial-up line.

Challenges of Cell Phone Interviews

In addition to providing a look at the cell-only population, this study was designed to assess the feasibility of conducting a telephone survey in a cell phone sampling frame. The conclusion is that such surveys are feasible, but they are more difficult and expensive to conduct than landline surveys.

Lower Cooperation Rate in Cell Phone Sample		
	Landline sample	Cell sample
Response rate	30	20
Cooperation rate	50	28
Refusal rate	30	50
Contact rate	68	76
Eligibility rate	43	59
	(752)	(751)
<small>Figures computed according to American Association for Public Opinion Research (AAPOR) standard definitions of Response Rate (3), Cooperation Rate (3), Refusal Rate (2), and Contact Rate (2).</small>		

Because most cell phone users have to pay for incoming calls (or use pre-paid minutes for them), a \$10 incentive was offered only to respondents in the cell phone sample. Despite this inducement, gaining cooperation from people on cell phones was notably more difficult than for those on a landline phone.

The response rate was 30% in the landline frame but only 20% in the cell phone frame. It was actually easier to make contact with a respondent through the cell phone frame (the contact rate was 76% in the cell frame vs. 68% in the landline frame). But that greater accessibility did not translate into more cooperation. Half of the people reached in the landline sample (50%) cooperated with the interview, compared with roughly a quarter (28%) of those reached in the cell phone sample.

Aside from difficulties in gaining cooperation, the process of sampling cell phone numbers proved to be reasonably efficient. More of the cell phone numbers (59%) were connected to eligible respondents than were numbers in the landline sample (43%).

Interviewing people on cell phones presents several challenges that require new procedures and have implications for overall costs. Among the most important of these is the fact that federal law prohibits the use of automated dialing devices when calling cell phones; thus each number in the cell phone sample had to be dialed manually.

The \$10 incentive offer incurred additional costs. An overwhelming majority of cell phone respondents who completed the interview (86%) accepted this offer and provided a mailing address to which the incentive was sent. In addition to the money paid to the respondent, the use of an incentive also incurs additional administrative work that raises the cost of the survey.

Results from the study suggest that interviews on a cell phone take about the same amount of time to complete as interviews on a landline phone. The same questionnaire was administered to both samples, and the median length was 11 minutes (mean = 11.8) for the cell phone sample and 10 minutes (mean = 10.2) for the landline respondents who reported owning a cell. Most of the small difference in average length between the two sampling frames is likely due to the extra time spent by the cell sample respondents in providing a mailing address for mailing the \$10 incentive.

Cell phones tend to be personal devices, and many adolescents and younger children have their own phone. One consequence of this is that more people reached in the cell frame turned out to be ineligible because of their age than is typically the case in a household-based landline sample.

Internet and Technology Use				
% of U.S. adults ¹	37%	53%	8%	
	Landline only	Landline & cell interviewed on...	Cell only	
Feelings about computers & tech.	%	%	%	%
Like	46	72	75	81
Dislike	15	4	2	2
Mixed	27	22	22	16
DK/Ref	12	3	1	2
	100	101	100	101
Use the internet	46	85	90	84
Send/receive email	41	80	83	77
Internet users:				
Online yesterday	64	75	72	70
Home internet connection				
(NET) Broadband	40	60	65	60
DSL	21	29	34	15
Cable	19	28	28	39
Wireless	0	2	2	5
T-1/Fiber optic	0	1	1	1
Dial-up	37	27	23	6
Other	1	1	*	1
No connection	21	9	10	31
DK/Ref	0	3	2	2
	99	100	100	100
	(217)	(535)	(552)	(200)

Figures based on unweighted data.
¹Source: 2005 National Health Interview Survey conducted for the National Center for Health Statistics through in-person interviewing. Figures do not sum to 100 because an estimated 2% of U.S. adults do not have a landline or a cell.

Interview Features		
	Landline sample	Cell sample
Dialing	auto	manual
Incentive	none	\$10
Median length	10 min*	11 min
Under-age cases	6	45
Voice mail message?	No	Yes
<small>*Landline sample figure based on those with cell phones.</small>		

Of people contacted in the cell phone frame, 45 cases were dropped from the study because the respondent was under 18. In the landline sample, only 6 cases were dropped because the sampled telephones were used exclusively by children.

Because people may not be accustomed to speaking with an unknown caller on their cell phone, two other modifications in Pew's regular protocol were used. The survey introduction included the acknowledgement that the respondent had been reached on a cell phone, and an immediate question as to whether it was safe to do an interview at that time. If the interviewer reached voice mail, a message was left explaining the purpose of the survey along with a toll-free number for the respondent to call and complete the interview at their convenience. Approximately 20 of the 751 respondents in the cell phone survey completed the interview in this way.

Data collection costs (apart from overall study design, programming, and analysis costs) were slightly more than twice as high for the cell phone sample as for the landline sample. Adding in the costs of administering and paying the \$10 incentive, the total costs of interviewing the cell phone sample were approximately 2.4 times the cost of the landline sample.

Cell Phone Respondents Not More Distracted

According to the interviewers working on the survey, the cell phone respondents were as focused and cooperative as those reached on a landline telephone. The vast majority (93%) of those surveyed on their cell phone demonstrated good or very good cooperation. This compares with 79% of those from the landline sample.

In addition to being cooperative, the cell phone respondents were also relatively focused on the survey task. In each sample only about 10% seemed somewhat or very distracted (8% cell phone vs. 11% landline, respectively), according to interviewers who conducted the survey. Likewise, when interviewers recorded whether it sounded as though the respondent had been doing another activity during the survey, results were quite similar for the two samples. About one-in-five of those from the cell phone sample (20%) and the landline sample (17%) were preparing a meal, watching television, shopping, exchanging comments with another person, or engaged in another activity.

Demographics of the Complete Cell and Landline Samples

People reached in the cell sample have a considerably different demographic profile from those reached in the landline sample, especially with respect to sex, race, age, education, and home ownership. On many variables, the landline sample was closer to the population parameter than the cell sample, though on some measures the cell sample picks up certain kinds of respondents that the landline samples under-represent.

A majority of those interviewed in the cell sample (55%) were men. Most landline surveys interview too few men, and require quotas or other techniques to obtain the proper proportion of men vs. women. As noted earlier, most landline surveys have too few young people in their samples (7% under age 25, vs. 13% in the population), but the cell phone sample had too many (21%). Conversely, the landline sample has too many older respondents (23% are 65 and older, vs. 16% in the population), while the cell phone sample had too few (just 8%).

The cell sample also proved to be effective at reaching African Americans, as 13% of the sample identified themselves as black. Landline samples often fall short of the population parameter (11%), though the landline sample in this project was very close (10%).

Although the survey was conducted only in English, fully 11% of the cell phone sample was Hispanic compared to just 6% of the landline frame sample. Hispanics constitute approximately 12% of the U.S. population.

Both samples include too many people with college experience, compared with the U.S. population. U.S. government figures show that 26% of the public has at least a four-year college degree, compared with 36% in the landline sample and 35% in the cell sample.

The people reached through these two samples differ in other ways as well. Over seven-in-ten (71%) of those interviewed from the landline sample report being a homeowner compared with closer to half (57%) of those reached on a cell phone. (The U.S. government estimates that 69% of the public are homeowners.)

In addition, fewer of the landline sample respondents were parents of children under 18 – a finding that likely reflects the presence of more young adults in the cell phone sample. At the same time, however, the samples were fairly similar in the percentage of respondents who were married (57% in the landline sample vs. 52% in cell sample – compared with 59% from U.S. government data), though the mix of unmarried people is very

Evaluations of Respondent Behavior

	Landline sample	Cell sample
<i>Respondent's cooperation</i>	%	%
Very good	53	78
Good	26	15
Fair	15	5
Poor	4	1
Very poor	2	1
	100	100
<i>Respondent distracted?</i>		
Very	2	1
Somewhat	9	7
Not too	18	16
Not at all	71	76
	100	100
<i>Respondent doing other activity?</i>		
Yes	17	20
No	83	80
	100	100

Based on interviewer rating recorded immediately after the interview.

Demographic Profile of the Samples

	Landline sample ¹	Cell sample	Census C.P.S. ²
	%	%	%
Male	48	55	48
Female	52	45	52
18-24	7	21	13
25-34	13	21	18
35-44	18	20	20
45-54	21	17	19
55-64	15	13	14
65+	23	8	16
White	80	74	71
Black	10	13	11
Hispanic	6	11	12
<i>Education</i>			
College grad	36	35	26
Some college	24	29	23
HS graduate	28	29	36
Not HS grad	10	7	15

different in the two samples. One-third (33%) of the cell sample reported having never been married, compared with just 18% in the landline sample; according to the government, 25% of the adult population has never been married.

<i>Own or rent</i>			
Own home	71	57	69
Rent/Other	25	42	31
Married	57	52	59
Divorced	12	11	10
Widowed	12	3	6
Never Married	18	33	25
¹ Landline and cell sample columns are based on unweighted data.			
² Census figures are from the 2004 and 2005 Current Population Surveys.			

EXHIBIT B



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February 21, 2008

Q: Are polls skewed because many people only have cell phones?

Is it true that people who have cell phones only (no landline) are not included in political polls? If so, would this skew the results because of the age-related use of this technology?

A: Poll-takers worry a lot about this. A recent study indicates that polling results aren't yet affected very much. We're not so sure.

The most common kinds of public opinion polls long have been conducted by calling a random sample of residential phones. This was OK when nearly every home had a phone, but in recent years a growing number of people, mostly young adults, have decided to use only a cell phone and do without a separate landline in their home.

It's possible to include cell phones in a poll sample, but it's expensive, difficult and seldom done. That means a growing number of cell-phone-only persons are generally not included, and their opinions are not reflected in the results we commonly see published.

How big a problem is this? A study [published](#) in January by the Pew Research Center for the People & the Press concluded that results of a poll including cell-only respondents were "virtually identical" to those based only on calls made to landlines. That's reassuring, but we remain skeptical.

Pew commissioned two polls, one in October and one in December of 2007, which together included 2,596 interviews conducted by calls to landlines and 841 interviews conducted by calls to cell phones, using a sample drawn from a national database of cell phone numbers. And of those reached by cell phone, 312 people said their mobile phone is the only one they use.

The researchers reported little difference between the results from the landline-only sample and the larger group of both landline and cell phone users:

Pew: When data from both samples are combined and weighted to match the U.S. population on key demographic measures, **the results are virtually identical to those from the landline survey alone.** Across more than 100 political and attitudinal questions on the surveys, including cell phone interviews does not change the results by more than two percentage points in the vast majority of comparisons, and in only one comparison is the difference as large as 4 points.

In particular, there is no evidence that the polling in the Democratic and Republican nomination contests is biased by the fact that most polls rely only on landline interviews.

Reasons to be Skeptical

We doubt that this study will be the last word on this subject, and we think the results of the Pew study include some good reasons to be somewhat skeptical of polling results in general. For one thing, the study illustrates that cell-only users tend to be very different from the landline sample. In the Pew study, the cell-only users tended to be:

- **Young:** 46 percent of the cell-only sample was in the 18 to 29 age group, compared with 12 percent for landline users.
- **Male:** Men made up 61 percent of the cell-only sample but only 48 percent of the landline sample.
- **Less White:** 19 percent of the cell-only sample was black, versus 11 percent for the landline sample. Asians made up 5 percent of the cell-only sample, versus 1 percent of the landline sample.
- **More Hispanic:** Hispanics (who can be of any race) were 13 percent of the cell-only sample compared with 6 percent of the landline sample.

On some questions the differences in opinions were striking. The authors reported that cell-only respondents were 14 percentage points less likely to say Social Security would be important to their vote and somewhat more likely to say immigration would be important, for example.

Poll-takers worry about what such differences might do to the accuracy of their results, and to public confidence in polling generally. Last year Public Opinion Quarterly devoted an entire special issue to the subject of cell-only users and what to do about them. One article predicted that by the end of 2009 more than 40 percent of adults in the United States under 30 years of age will have adopted a "cell phone only" lifestyle. Another found that telephone surveys using only landline calls underestimate the prevalence of health behaviors such as binge drinking, smoking and HIV testing. A wrap-up article stated that "the possibility exists for very sizable coverage errors associated with young adults in future U.S. general population telephone surveys that do not include the sampling of cell phone numbers."

There were already plenty of reasons to treat polling results with caution. To cite only the most recent example, poll-takers are still trying to figure out what went wrong with surveys showing Democratic presidential candidate Barack Obama with a [big lead](#) just before the Jan. 9 New Hampshire primary, which he [lost](#) by 2 percentage points.

Even assuming that poll-takers could achieve a perfectly unbiased, random sample of the entire population, there is inevitably a statistical margin of error. That means that the laws of chance dictate that about 95 percent of the time the results from the sample may differ by, say, 2 or 3 percentage points from the result that would be obtained if everybody in the population were surveyed. By the same token, however, one out of 20 such polls will produce results that are off by even *more* than the margin of error.

Furthermore, telephone polling has always missed a fair number of persons who don't have a phone. As recently as 1990, for example, the Census Bureau [reported](#) that 5.2 percent of the homes in the U.S. had no telephone, and in several states the figure was 10 percent or more. (In 2000, the Census Bureau said the number without phones had dropped to 2.4 percent but added, "Increased cell phone usage probably played a major role in this dramatic change.") In addition, poll-takers fret about an increasing number of persons who answer their phones but simply refuse to answer their questions.

Poll-takers apply various statistical manipulations to their survey results in an attempt to compensate for those who are missed in phone surveys. That task is becoming more difficult as more Americans do without hard-wired phones, giving the wise citizen one more reason not to put too much weight on any particular finding from a telephone poll.

-Brooks Jackson

Sources

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EXHIBIT C

Industries

[[Overview](#) | [Collection](#) | [Communications](#) | [Consumer Products](#) | [Education](#) | [Financial Services](#) | [Fundraising](#) | [Healthcare](#)

[Home & Personal Services](#) | [Market Research](#) | [Mortgage](#) | [Newspapers & Publishing](#) | [Service Bureaus](#) | [Travel & VO](#)]



Collection

Collection Contact Management Software from Noble Systems helps collection organizations obtain more debt promises-to-pay, more efficiently and for less cost. Noble Systems offers powerful technology solutions for the Collection industry that can help you increase your right-party contact rates and streamline the communications process. Noble's unified solutions give you the tools to enhance the productivity of your collectors, save resources, gain more promises-to-pay, and improve your overall collection results.

Build Productivity with More Right-Party Contacts

The Noble communications platform uses one of the industry's most advanced dialing algorithms and superior tone and voice detection to drive collector productivity rates. With 95%+ answering machine detection, and busy, no answer, and disconnect (temporary and permanent) tone recognition, collectors receive only live debtors, instead of unproductive numbers. Multiple phone numbers per debtor, account ownership and preview dialing, and multi-line dialing also help build contact rates.

Save Collector Resources with Personalized Debtor Messaging

Outbound messaging and text-to-speech tools help ensure that collectors are talking to the correct people. If the debtor is available, you can transfer the call to a collector; if not, leave an automated message with a return phone number. For more efficient service, the Noble Solution can be integrated with your existing collections system to provide account information and payment options and record contact results automatically, without requiring a collector.

Increase Debtor Response with Interactive Tools & Payment Options

Self-service menus allows debtors to respond immediately by entering a credit card number on the keypad for automated processing or getting an address to mail a payment. Or, they can choose to speak with a collector to negotiate a settlement and receive more account details.

Improve Debt-Recovery & Service Levels with Effective Routing

The use of skills-based routing can increase your collection results by sending debtors to more experienced collectors first, as they are available. 'Tougher' accounts can be routed to more effective closers, and Account Ownership features allow collectors to 'own' specific accounts. Digital recording tools capture promises-to-pay for later verification and debtors can be transferred as needed, without hanging up and dialing another number.

Unified and Flexible Collector Desktop

The Unified Collector Desktop can improve the workflow for your collectors and help increase their efficiency. Noble's integration tools help you consolidate multiple applications, including the call script, call utilities, collection software, databases, and more, into a single interface. You can seamlessly integrate collector scripts with information and data and link applications in real-time. Your collectors will have access to all of the information and tools they need to work with debtors. Flexible collector scripting allows you to manage any project, including the flow of a call or any interaction process. You can also control branding, how representatives capture or provide information, etc. Your non-technical managers can make changes in seconds.

Create a Unified Environment for All Communications

Collectors can be assigned to handle both outbound and inbound calls at the same time, promoting increased efficiency. Dialing automatically adjusts to fluctuating call volumes while optimizing collector activity. Collectors can work one-on-one with debtors on assigned accounts. Email and web support help you provide completely unified collection services for multimedia channels.

Maximize Performance with the Dynamic Management Suite

Manage all of your collections activities with our comprehensive Management Suite. Designed in a user-friendly environment, our manager tools allow users to build scripts, control center resources, monitor real-time performance, and create custom reports, without requiring high-level IT experts.

Features:

- » Flexible Collector Scripting – The Collector script controls how information is captured and the workflow of the complete collection process. Noble's scripting solution offers a flexible, intuitive environment and can work with your current applications.
- » Multiple Numbers per Record – Noble stores multiple phone numbers per record, with a main number and alternate numbers (such as home, work, cell, etc.). You can easily create custom dialing plans to dial different numbers from the record based on the time of day.

Learn More:

- » [Collection Solutions](#)
- » Download our guide to [Best Practices in Collection Center Technologies](#)
- » Case Studies
 - [Apex Credit Mgmt Ltd](#)
 - [FBCS Inc](#)
 - [Pennco Associates, Inc](#)
 - [Student Loan Collections](#)
 - [Tate & Kirlin Associates](#)
 - [Vilco](#)

- » Multiple Dialer Modes – Predictive dialing is one of several collections dialer modes. The Noble solution provides both predictive and non-predictive dialing modes (preview, dial now, manual). You can choose the dialing mode for each individual campaign, based on program needs, and assign different dialing modes to different collector groups, if desired.
- » Automated Messaging – Outbound messaging helps you increase contact rates while using collector resources more efficiently. Automated messages can be used when an answering machine is detected, leaving a call-back number for more information. Live contacts may also be directed to a pre-recorded message to help identify the right-party and to provide debtor self-service, with access to personalized account information or the option to speak with a collector.
- » Debtor Contact Management – Noble's Debtor Contact Management System (DCMS) helps improve collector productivity with Account Ownership. Managing specific accounts helps collectors build relationships with debtors and increase payment rates. Collectors can review their work lists and select a record to view debtor information and account history before the call is dialed.
- » Real-time Record Update – It is critical to be able to update campaigns in real-time so that parties are not called inappropriately. Noble's integrated database updates records immediately as information is gathered and calls are completed. For instance, a customer who makes a payment in the morning can be removed from the call list so that they will not receive a call later in the day.
- » Monitoring and Reporting – Reports and activities can be monitored and viewed in real-time to manage programs more effectively. Agencies can keep clients informed of campaign performance and results with data exports, summary and detail reports, and direct access to monitor collectors assigned to their accounts.
- » Collector Call-back – Allows collectors to schedule callbacks as required, with an on-screen calendar to select specific dates and times. The callbacks can be routed to a specific collector or group of collectors.
- » Network Level Message Classification – Many debtors change their phone numbers to avoid collection calls. The solution differentiates, identifies and categorizes each network message for every number and record dialed. All information is stored in the database so that it can be easily reported and queried to build new targeted calling lists.
- » Skills-based Routing – Call routing based on collector skills can give priority to collectors according to proficiency level or other variables.
- » Powerful Call Blending Functionality – Blending dramatically reduces the costs of maintaining two separate inbound and outbound collector groups. Collectors can move fluidly between both incoming and out-dialed calls, without having to log in and out of programs between contacts.

Benefits:

- » More collections promises-to-pay, accomplished more efficiently at a lower cost.
- » Capture, segment and analyze customer contact data for appropriate follow up collection actions.
- » Seamless integration with established systems and databases.
- » Manage each contact appropriately based on debt delinquency level or other rules.
- » Professional customer interactions, at the right time, with the right channel and appropriate data.
- » Route calls to the appropriate self-service channel or agent skill group.
- » Multiple channels for contacts, including email, fax, web, text, predictive dialers, and voice broadcasting.
- » A unified inbound outbound software solution provides advanced capabilities that allow your team to manage all phases of the collections process.

EXHIBIT D

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

D.G., by and through)	
LOIDY TANG as Next Friend, individually)	
and on behalf of a class,)	11 C 2062
)	
Plaintiff,)	Judge Lefkow
)	
v.)	Magistrate Judge Cox
)	
DIVERSIFIED ADJUSTMENT SERVICE,)	
INC,)	
)	
Defendant.)	

DECLARATION OF CURTIS C. WARNER

I, Curtis C. Warner declare that the following statements are true:

1. I received my undergraduate degree from Grand Valley State University, Allendale, Michigan, in 1993, my Masters Degree in Education from Wayne State University, Detroit, Michigan, in 1998, and my Juris Doctorate from Michigan State University – Detroit College of Law (now Michigan State University – College of Law), *cum laude*, in 2002. During law school, I was the Editor-in-Chief for the Michigan State University – Detroit College of Law *Journal of Medicine and Law* and interned with the United States Army Judge Advocate General’s Office at Fort Carson in Colorado.

2. In August 2002, I began working as an associate attorney at Collins & Blaha, P.C., an employment law firm that represents various school districts in the State of Michigan.

3. In April 2003, I worked as a staff attorney at Michigan Migrant Legal Assistance Project, Inc., in Grand Rapids, Michigan, representing migrant farm workers in various labor and consumer disputes before administrative agencies and federal and state courts. During that time I represented a client before the Michigan Supreme Court. *Lopez v. Hardy’s Holsteins LLC*, 2005

MIWCLR (LRP) LEXIS 151 (Mich. WCAC, June 24, 2005) *sub nom. Lopez v. Worker's Compensation Appellate Comm'n.*, No. 263842, 2005 Mich. App. LEXIS 3312 (Mich. App., Sept. 23, 2005); 704 N.W. 2d 709, 474 Mich. 893 (Mich. 2005).

4. While working at Michigan Migrant Legal Assistance Project, Inc., I served as an associate member on the State Bar's Committee on Legal Aid, was a member of the Michigan Pesticide Action Committee, and participated in committee meetings with state legislators and other members of the state bar focusing on passing legislation to end the unlicensed practice of law by "notarios."

5. From March 2005 to September 2006, I was an associate attorney at the consumer class action law firm of Edelman Combs Lattuner & Goodwin LLC in Chicago, Illinois ("Edelman Combs"). "Edelman, Combs, Lattuner & Goodwin, LLC, [is] a small Chicago law firm specializing in consumer credit, debt collection, FDCPA, predatory lending practices, and class action litigation." *Miller v. Midland Credit Mgmt.*, 08 C 780, 2009 U.S. Dist. LEXIS 16273 * 6-7 (N.D. Ill. Mar. 2, 2009). While at Edelman Combs, I was primarily responsible for the prosecution of consumer class actions brought under the Fair Debt Collection Practices Act ("FDCPA"), the Fair Credit Reporting Act ("FCRA"), the Illinois Consumer Fraud Act ("ICFA") and the Illinois Security Deposit Act.

6. In October 2006, I started Warner Law Firm, LLC, and am the principal member of the firm that represents consumers in the federal courts of Illinois, Michigan, Indiana and in the Circuit Court for Cook County, Illinois and other outlying county circuit courts. The firm has also represented a consumer in a Michigan state district court.

7. I am a member of both the Michigan (Admitted 2002) and Illinois (Admitted 2004) bars and am admitted to practice before the following Courts: Seventh Circuit Court of Appeals, Sixth Circuit Court of Appeals, Northern District of Illinois, Central District of Illinois, Southern

District of Illinois, Eastern District of Michigan, Western District of Michigan, Northern District of Indiana, Southern District of Indiana and Eastern District of Wisconsin. I have also been permitted to practice *pro hac vice* in the Eastern District of Virginia and Monterey County, California.

8. I am a member of the Trial Bar of the Northern District of Illinois, having twice served the Court as appointed counsel in a Title VII and a bank financing case. I have also performed *pro bono* work for the Legal Aid Foundation of Metropolitan Chicago.

9. Since its founding in 2006, Warner Law Firm, LLC and Curtis C. Warner have been approved as class counsel in the following matters to which final approval has been granted: *Vallejo v. National Credit Adjusters, LLC*, 10-cv-103 (N.D. Ind. Nov. 3, 2010); *Mitchem v. Northstar Location Services, LLC*, 09 C 6711, (N.D. Ill. May 13, 2010); *Housenkamp v. Weltman, Weinberg & Reis, Co. of Michigan*, Case No. 1:09-cv-10613-TLL-CEB, 2010 U.S. Dist. LEXIS 3667, Preliminary Approval Order, (E.D. Mich. Jan. 19, 2010), final approval granted, (May 11, 2010); *Kern v. LVNV Funding, Inc.*, 09 C 2202, (N.D. Ill. Jan. 21, 2010); *Prieto et al. v. HBLC, Inc. and Steven J. Fink & Assoc., P.C.*, 08 C 2817 (N.D. Ill. Dec. 15, 2008); *Dobson v. Asset Acceptance LLC*, 07 C 6203, (assigned as related to 07 C 5967) (N.D. Ill. 2008) (establishing a class fund of approximately \$1.5 million dollars in credit for class members); *Horton v. IQ Telecom*, 07 C 2478 (N.D. Ill. May 5, 2008).

10. In *Cavin v. Home Loan Center, Inc.* 236 F.R.D 387 (N.D. Ill. 2007), a specific finding regarding my ability as class counsel was made in that, “The Court finds that Mr. Warner [is]. . . ‘experienced, competent, qualified and able to conduct the litigation vigorously’”, and therefore met the adequacy of class counsel requirement under Rule 23(a)(4)). *Id.* at 395.

11. I have experience as the primary attorney prosecuting, or was materially involved at some point in the litigation of the following consumer matters that were certified as a class action or

were settled on a class basis while at Edelman Combs: *Cavin v. Home Loan Center, Inc.*, 236 F.R.D. 387 (N.D. Ill. 2006); *Larson v. Capital One Auto Finance, Inc.* 06 C 1174, 2007 U.S. Dist. LEXIS 15620 (N.D. Ill. March 5, 2007); *Thomas v. Capital One Auto Finance, Inc.*, 06 C 643, 2006 U.S. Dist. LEXIS 81358 (N.D. Ill. Oct. 24, 2006); *Kudlicki v. Capital One Auto Finance, Inc.*, 06 C 1918, 2006 U.S. Dist. LEXIS 81103 (N.D. Ill. Nov. 2, 2006); *Pavone v. Aegis Lending Corp.*, 05 C 5129, 2006 U.S. Dist. LEXIS 62157 (N.D. Ill. Aug. 31, 2006); *Thomas v. Arrow Financial Services, LLC*, 05 C 5699, (N.D. Ill.) (\$500 or 20% of the outstanding debt, whichever is less, to his or her outstanding debt; \$100 or a *pro rata* share of \$50,000 whichever is less class settlement established. Settled in principal on class basis prior to my departure from Edelman Combs); *Holt v. Wells Fargo Financial Acceptance America, Inc.*, 06 C 1949 (N.D. Ill) combined with *Perez v. Z Frank LLC*, 06 C 45 (N.D. Ill.) (\$438,200 class settlement fund established. Settled in principal on class basis prior to my departure from Edelman Combs); *Smith v. Rockenbach Chevrolet Sales, Inc.* 05 C 5454 (N.D. Ill.) (\$116,841.24 settlement fund established); *Cavin v. Bill Jacobs Joliet, L.L.C.*, 05 C 5025 (N.D. Ill.) (\$96,658.72 class settlement fund established. Settled in principal with Defendant Consumer Portfolio Services on a class basis prior to my departure from Edelman Combs); *Miller v. Ocwen Federal Bank FSB*, 05 C 308 (N.D. Ill.) (\$100,000 class settlement fund established); *Asher v. Van Ru Credit Corp.*, 04 C 5947 (N.D. Ill) (\$40,000 class settlement fund established); *Hale v. East Lake Development & Mgt.*, 2000 CH 16139 (Cook County, Illinois) (\$436,875 settlement fund established for two classes); *Fox v. Marquette Management, Inc.* 2002 CH 12449 (Cook County, Illinois) (\$150,000 class settlement fund established).

12. I was the primary brief writer on behalf of the plaintiff in the following cases: *Schlacher v. Law Offices of Phillip J. Rotche & Assocs., P.C.*, 574 F.3d 852 (7th Cir. 2009); *Phinn v. Capital One Finance, Inc.*, 502 F. Supp. 2d 625 (E.D. Mich. 2007); *Cavin v. Home Loan Center*,

Inc., 236 F.R.D. 387 (N.D. Ill. 2006); *Hendricks v. DSW Shoe Warehouse, Inc.*, 444 F. Supp. 2d 775 (W.D. Mich. 2006); *Mitchem v. Ill. Collection Serv.*, 09 C 7274, 2010 U.S. Dist. LEXIS 76581 (N.D. Ill. Jul. 29, 2010), *Peralta v. Accept Acceptance, LLC*, 1:07-cv-1270, 2009 U.S. Dist. LEXIS 18195 (W.D. Mich. March 10, 2009); *Glover v. Mary Jane M. Elliot, P.C.*, Case No. 1:07-cv-648, 2007 U.S. Dist. LEXIS 73605 (W.D. Mich. Oct. 2, 2007); *Chavez v. Bowman, Heintz, Bocia & Vician*, 07 C 670, 2007 U.S. Dist. LEXIS 61936 (N.D. Ill. Aug. 22, 2007); *Cunningham v. Van Ru Credit Corp.*, 06 C 1042, 2006 WL 3289775 (E.D. Mich. Nov. 12, 2006); *Kudlicki v. Capital One Auto Finance*, 06 C 1918, 2006 WL 3210492 (N.D. Ill. Nov. 2, 2006); *Johnston v. Arrow Financial Services, LLC*, 06 C 13, 2006 WL 2710662 (N.D. Ill. Sept. 15, 2006); *Pavone v. Aegis Lending Corp.*, 05 C 5129, 2006 WL 2536632 (N.D. Ill. Aug. 31, 2006); *Cunningham v. Van Ru Credit Corp.*, 06 C 1042, 2006 WL 2056576 (E.D. Mich. July 21, 2006); *Richardson v. DSW Inc.*, 05 C 4599, 2006 WL 163167 (N.D. Ill. Jan. 18, 2006); *Richardson v. DSW Inc.*, 05 C 4599, 2005 WL 2978755 (N.D. Ill. Nov. 3, 2005); *Lopez v. Hardy's Holsteins LLC*, 2005 MIWCLR (LRP) LEXIS 151 (Mich. WCAC, June 24, 2005) *sub nom. Lopez v. Worker's Compensation Appellate Comm'n.*, No. 263842, 2005 Mich. App. LEXIS 3312 (Mich. App. Sept. 23, 2005); 704 N.W. 2d 709, 474 Mich. 893 (Mich. 2005).

13. I was also the primary brief writer on *Balbarin v. North Star Capital Acquisition*, 2011 U.S. Dist. LEXIS 686 (N.D. Ill. Jan. 5, 2011), and *Mitchem v. Illinois Collection Service*, 2009 C 7274, 2011 U.S. Dist. LEXIS 714 (N.D. Ill. Jan. 3, 2011), which are the first two cases in the nation granting a contested class certification motion for claims brought under the Telephone Communications Act for calls to cellular telephones without express prior consent.

14. Since forming Warner Law Firm, LLC, I have filed over 75 cases on behalf of consumers throughout the federal district courts of Illinois, Michigan and Indiana and have

represented clients' interest before the Seventh and the Sixth Circuit Court of Appeals. Since beginning the practice of law, I have been involved in the litigation of over 150 cases on behalf of consumers in the courts to which I am admitted.

I Curtis C. Warner declare under penalty of perjury that the foregoing is true and correct.

Executed on March 25, 2011.

s/ Curtis C. Warner
Curtis C. Warner

Curtis C. Warner cwarner@warnerlawllc.com
WARNER LAW FIRM, LLC
Millennium Park Plaza
155 N. Michigan Ave. Ste. 560
Chicago, Illinois 60601
(312) 238-9820 (TEL)